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TITLE : MELT BLOWN NONWOVEN FABRIC EXCELLENT IN FLEXIBILITY AND ELONGATION PROPERTY

ABSTRACT : PROBLEM TO BE SOLVED: To provide a polypropylene(PP) melt blown(MB) nonwoven fabric, flexible without carrying out post-processing or adding an elastomer resin, having  $\geq 20$ - $30\%$  elongation when begun to break by an external force, and high elongation compared with usual PP melt blown nonwoven fabrics by improving an adhering state and slipperiness between the PP fibers in the melt blown nonwoven fabric.

SOLUTION: This melt blown nonwoven fabric comprises polypropylene fine fiber having 0.1-10  $\mu\text{m}$  average fiber diameter. Stress at 10% stretch per unit area in at least one direction of the nonwoven fabric is  $< 0.03 \text{ (kg/5 cm width)/(g/m}^2\text{)}$ . When  $S_1$  (kg/5 cm width) is peak stress, and X (%) is elongation when the stress is substantially 0 from the point of the peak stress as the starting point, X satisfies the following equation I, and when stress at 20% elongation from the peak stress is  $S_2$  (kg/5 cm width),  $S_1$  and  $S_2$  satisfy the following formulae I, II; formula I:  $X \geq 40$ , formula II:  $S_2 \geq S_1/3$ .

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